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Sequence Listing was accepted.

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217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2011; month=3; day=8; hr=6; min=43; sec=28; ms=690; ]

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Application No: 10552291

Version No: 2.0

Input Set:

Output Set:

Started: 2011-03-07 16:54:26.216

Finished: 2011-03-07 16:54:32.175

Elapsed: 0 hr(s) 0 min(s) 5 sec(s) 959 ms

Total Warnings: 47

Total Errors: 0

No. of SeqIDs Defined: 57

Actual SeqID Count: 57

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
W 213	Artificial or Unknown found in <213> in SEQ ID (22)
W 213	Artificial or Unknown found in <213> in SEQ ID (23)
W 213	Artificial or Unknown found in <213> in SEQ ID (24)
W 213	Artificial or Unknown found in <213> in SEQ ID (25)
W 213	Artificial or Unknown found in <213> in SEQ ID (26)
W 213	Artificial or Unknown found in <213> in SEQ ID (27)
W 213	Artificial or Unknown found in <213> in SEQ ID (28)
W 213	Artificial or Unknown found in <213> in SEQ ID (29)
W 213	Artificial or Unknown found in <213> in SEQ ID (30)

**Input Set:**

**Output Set:**

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**Actual SeqID Count:** 57

Error code

Error Description

This error has occurred more than 20 times, will not be displayed

# SEQUENCE LISTING

<110> REGEN Biotech, Inc.

<120> Use of a peptide that interacts with alpha v beta3 integrin of endothelial cell

<130> OP04-1024

<140> 10552291

<141> 2005-10-03

<150> KR 10-2003-0021065

<151> 2003-04-03

<160> 57

<170> KopatentIn 1.71

<210> 1

<211> 683

<212> PRT

<213> Homo sapiens

<400> 1

Met Ala Leu Phe Val Arg Leu Leu Ala Leu Ala Leu Ala Leu Leu  
1 5 10 15

Gly Pro Ala Ala Thr Leu Ala Gly Pro Ala Lys Ser Pro Tyr Gln Leu  
20 25 30

Val Leu Gln His Ser Arg Leu Arg Gly Arg Gln His Gly Pro Asn Val  
35 40 45

Cys Ala Val Gln Lys Val Ile Gly Thr Asn Arg Lys Tyr Phe Thr Asn  
50 55 60

Cys Lys Gln Trp Tyr Gln Arg Lys Ile Cys Gly Lys Ser Thr Val Ile  
65 70 75 80

Ser Tyr Glu Cys Cys Pro Gly Tyr Glu Lys Val Pro Gly Glu Lys Gly  
85 90 95

Cys Pro Ala Ala Leu Pro Leu Ser Asn Leu Tyr Glu Thr Leu Gly Val  
100 105 110

Val Gly Ser Thr Thr Thr Gln Leu Tyr Thr Asp Arg Thr Glu Lys Leu  
115 120 125

Arg Pro Glu Met Glu Gly Pro Gly Ser Phe Thr Ile Phe Ala Pro Ser  
130 135 140

Asn Glu Ala Trp Ala Ser Leu Pro Ala Glu Val Leu Asp Ser Leu Val  
145 150 155 160

Ser Asn Val Asn Ile Glu Leu Leu Asn Ala Leu Arg Tyr His Met Val  
165 170 175

Gly	Arg	Arg	Val	Leu	Thr	Asp	Glu	Leu	Lys	His	Gly	Met	Thr	Leu	Thr	180	185	190
Ser	Met	Tyr	Gln	Asn	Ser	Asn	Ile	Gln	Ile	His	His	Tyr	Pro	Asn	Gly	195	200	205
Ile	Val	Thr	Val	Asn	Cys	Ala	Arg	Leu	Leu	Lys	Ala	Asp	His	His	Ala	210	215	220
Thr	Asn	Gly	Val	Val	His	Leu	Ile	Asp	Lys	Val	Ile	Ser	Thr	Ile	Thr	225	230	235
Asn	Asn	Ile	Gln	Gln	Ile	Ile	Glu	Ile	Glu	Asp	Thr	Phe	Glu	Thr	Leu	245	250	255
Arg	Ala	Ala	Val	Ala	Ala	Ser	Gly	Leu	Asn	Thr	Met	Leu	Glu	Gly	Asn	260	265	270
Gly	Gln	Tyr	Thr	Leu	Leu	Ala	Pro	Thr	Asn	Glu	Ala	Phe	Glu	Lys	Ile	275	280	285
Pro	Ser	Glu	Thr	Leu	Asn	Arg	Ile	Leu	Gly	Asp	Pro	Glu	Ala	Leu	Arg	290	295	300
Asp	Leu	Leu	Asn	Asn	His	Ile	Leu	Lys	Ser	Ala	Met	Cys	Ala	Glu	Ala	305	310	315
Ile	Val	Ala	Gly	Leu	Ser	Val	Glu	Thr	Leu	Glu	Gly	Thr	Thr	Leu	Glu	325	330	335
Val	Gly	Cys	Ser	Gly	Asp	Met	Leu	Thr	Ile	Asn	Gly	Lys	Ala	Ile	Ile	340	345	350
Ser	Asn	Lys	Asp	Ile	Leu	Ala	Thr	Asn	Gly	Val	Ile	His	Tyr	Ile	Asp	355	360	365
Glu	Leu	Leu	Ile	Pro	Asp	Ser	Ala	Lys	Thr	Leu	Phe	Glu	Leu	Ala	Ala	370	375	380
Glu	Ser	Asp	Val	Ser	Thr	Ala	Ile	Asp	Leu	Phe	Arg	Gln	Ala	Gly	Leu	385	390	395
Gly	Asn	His	Leu	Ser	Gly	Ser	Glu	Arg	Leu	Thr	Leu	Leu	Ala	Pro	Leu	405	410	415
Asn	Ser	Val	Phe	Lys	Asp	Gly	Thr	Pro	Pro	Ile	Asp	Ala	His	Thr	Arg	420	425	430
Asn	Leu	Leu	Arg	Asn	His	Ile	Ile	Lys	Asp	Gln	Leu	Ala	Ser	Lys	Tyr	435	440	445
Leu	Tyr	His	Gly	Gln	Thr	Leu	Glu	Thr	Leu	Gly	Gly	Lys	Lys	Leu	Arg	450	455	460
Val	Phe	Val	Tyr	Arg	Asn	Ser	Leu	Cys	Ile	Glu	Asn	Ser	Cys	Ile	Ala	465	470	475
																		480

Ala His Asp Lys Arg Gly Arg Tyr Gly Thr Leu Phe Thr Met Asp Arg  
                   485                                  490                                  495

Val Leu Thr Pro Pro Met Gly Thr Val Met Asp Val Leu Lys Gly Asp  
                   500                                  505                                  510

Asn Arg Phe Ser Met Leu Val Ala Ala Ile Gln Ser Ala Gly Leu Thr  
                   515                                  520                                  525

Glu Thr Leu Asn Arg Glu Gly Val Tyr Thr Val Phe Ala Pro Thr Asn  
                   530                                  535                                  540

Glu Ala Phe Arg Ala Leu Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly  
                   545                                  550                                  555                                  560

Asp Ala Lys Glu Leu Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu  
                                   565                                  570                                  575

Ile Leu Val Ser Gly Gly Ile Gly Ala Leu Val Arg Leu Lys Ser Leu  
                                   580                                  585                                  590

Gln Gly Asp Lys Leu Glu Val Ser Leu Lys Asn Asn Val Val Ser Val  
                   595                                  600                                  605

Asn Lys Glu Pro Val Ala Glu Pro Asp Ile Met Ala Thr Asn Gly Val  
                   610                                  615                                  620

Val His Val Ile Thr Asn Val Leu Gln Pro Pro Ala Asn Arg Pro Gln  
                   625                                  630                                  635                                  640

Glu Arg Gly Asp Glu Leu Ala Asp Ser Ala Leu Glu Ile Phe Lys Gln  
                                   645                                  650                                  655

Ala Ser Ala Phe Ser Arg Ala Ser Gln Arg Ser Val Arg Leu Ala Pro  
                                   660                                  665                                  670

Val Tyr Gln Lys Leu Leu Glu Arg Met Lys His  
                   675                                  680

<210>     2  
 <211>     103  
 <212>     PRT  
 <213>     Homo sapiens

<400>     2  
 Gly Pro Gly Ser Phe Thr Ile Phe Ala Pro Ser Asn Glu Ala Trp Ala  
       1                  5                                  10                                  15

Ser Leu Pro Ala Glu Val Leu Asp Ser Leu Val Ser Asn Val Asn Ile  
                   20                                  25                                  30

Glu Leu Leu Asn Ala Leu Arg Tyr His Met Val Gly Arg Arg Val Leu  
                   35                                  40                                  45

Thr Asp Glu Leu Lys His Gly Met Thr Leu Thr Ser Met Tyr Gln Asn

50

55

60

Ser Asn Ile Gln Ile His His Tyr Pro Asn Gly Ile Val Thr Val Asn  
65 70 75 80

Cys Ala Arg Leu Leu Lys Ala Asp His His Ala Thr Asn Gly Val Val  
85 90 95

His Leu Ile Asp Lys Val Ile  
100

<210> 3  
<211> 131  
<212> PRT  
<213> Homo sapiens

<400> 3  
Asn Ile Gln Gln Ile Ile Glu Ile Glu Asp Thr Phe Glu Thr Leu Arg  
1 5 10 15

Ala Ala Val Ala Ala Ser Gly Leu Asn Thr Met Leu Glu Gly Asn Gly  
20 25 30

Gln Tyr Thr Leu Leu Ala Pro Thr Asn Glu Ala Phe Glu Lys Ile Pro  
35 40 45

Ser Glu Thr Leu Asn Arg Ile Leu Gly Asp Pro Glu Ala Leu Arg Asp  
50 55 60

Leu Leu Asn Asn His Ile Leu Lys Ser Ala Met Cys Ala Glu Ala Ile  
65 70 75 80

Val Ala Gly Leu Ser Val Glu Thr Leu Glu Gly Thr Thr Leu Glu Val  
85 90 95

Gly Cys Ser Gly Asp Met Leu Thr Ile Asn Gly Lys Ala Ile Ile Ser  
100 105 110

Asn Lys Asp Ile Leu Ala Thr Asn Gly Val Ile His Tyr Ile Asp Glu  
115 120 125

Leu Leu Ile  
130

<210> 4  
<211> 129  
<212> PRT  
<213> Homo sapiens

<400> 4  
Pro Asp Ser Ala Lys Thr Leu Phe Glu Leu Ala Ala Glu Ser Asp Val  
1 5 10 15

Ser Thr Ala Ile Asp Leu Phe Arg Gln Ala Gly Leu Gly Asn His Leu  
20 25 30

Ser Gly Ser Glu Arg Leu Thr Leu Leu Ala Pro Leu Asn Ser Val Phe  
 35 40 45  
 Lys Asp Gly Thr Pro Pro Ile Asp Ala His Thr Arg Asn Leu Leu Arg  
 50 55 60  
 Asn His Ile Ile Lys Asp Gln Leu Ala Ser Lys Tyr Leu Tyr His Gly  
 65 70 75 80  
 Gln Thr Leu Glu Thr Leu Gly Gly Lys Lys Leu Arg Val Phe Val Tyr  
 85 90 95  
 Arg Asn Ser Leu Cys Ile Glu Asn Ser Cys Ile Ala Ala His Asp Lys  
 100 105 110  
 Arg Gly Arg Tyr Gly Thr Leu Phe Thr Met Asp Arg Val Leu Thr Pro  
 115 120 125  
 Pro

<210> 5  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 5  
 Met Gly Thr Val Met Asp Val Leu Lys Gly Asp Asn Arg Phe Ser Met  
 1 5 10 15  
 Leu Val Ala Ala Ile Gln Ser Ala Gly Leu Thr Glu Thr Leu Asn Arg  
 20 25 30  
 Glu Gly Val Tyr Thr Val Phe Ala Pro Thr Asn Glu Ala Phe Arg Ala  
 35 40 45  
 Leu Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly Asp Ala Lys Glu Leu  
 50 55 60  
 Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu Ile Leu Val Ser Gly  
 65 70 75 80  
 Gly Ile Gly Ala Leu Val Arg Leu Lys Ser Leu Gln Gly Asp Lys Leu  
 85 90 95  
 Glu Val Ser Leu Lys Asn Asn Val Val Ser Val Asn Lys Glu Pro Val  
 100 105 110  
 Ala Glu Pro Asp Ile Met Ala Thr Asn Gly Val Val His Val Ile Thr  
 115 120 125  
 Asn Val Leu  
 130

<210> 6  
<211> 85  
<212> PRT  
<213> Homo sapiens

<400> 6  
Arg Ala Leu Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly Asp Ala Lys  
1 5 10 15  
Glu Leu Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu Ile Leu Val  
20 25 30  
Ser Gly Gly Ile Gly Ala Leu Val Arg Leu Lys Ser Leu Gln Gly Asp  
35 40 45  
Lys Leu Glu Val Ser Leu Lys Asn Asn Val Val Ser Val Asn Lys Glu  
50 55 60  
Pro Val Ala Glu Pro Asp Ile Met Ala Thr Asn Gly Val Val His Val  
65 70 75 80  
Ile Thr Asn Val Leu  
85

<210> 7  
<211> 119  
<212> PRT  
<213> Homo sapiens

<400> 7  
Met Gly Thr Val Met Asp Val Leu Lys Gly Asp Asn Arg Phe Ser Met  
1 5 10 15  
Leu Val Ala Ala Ile Gln Ser Ala Gly Leu Thr Glu Thr Leu Asn Arg  
20 25 30  
Glu Gly Val Tyr Thr Val Phe Ala Pro Thr Asn Glu Ala Phe Arg Ala  
35 40 45  
Leu Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly Asp Ala Lys Glu Leu  
50 55 60  
Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu Ile Leu Val Ser Gly  
65 70 75 80  
Gly Ile Gly Ala Leu Val Arg Leu Lys Ser Leu Gln Gly Asp Lys Leu  
85 90 95  
Glu Val Ser Leu Lys Asn Asn Val Val Ser Val Asn Lys Glu Pro Val  
100 105 110  
Ala Glu Pro Asp Ile Met Ala  
115

<210> 8

<211> 113  
<212> PRT  
<213> Homo sapiens

<400> 8  
Met Gly Thr Val Met Asp Val Leu Lys Gly Asp Asn Arg Phe Ser Met  
1 5 10 15  
Leu Val Ala Ala Ile Gln Ser Ala Gly Leu Thr Glu Thr Leu Asn Arg  
20 25 30  
Glu Gly Val Tyr Thr Val Phe Ala Pro Thr Asn Glu Ala Phe Arg Ala  
35 40 45  
Leu Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly Asp Ala Lys Glu Leu  
50 55 60  
Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu Ile Leu Val Ser Gly  
65 70 75 80  
Gly Ile Gly Ala Leu Val Arg Leu Lys Ser Leu Gln Gly Asp Lys Leu  
85 90 95  
Glu Val Ser Leu Lys Asn Asn Val Val Ser Val Asn Lys Glu Pro Val  
100 105 110  
Ala

<210> 9  
<211> 73  
<212> PRT  
<213> Homo sapiens

<400> 9  
Arg Ala Leu Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly Asp Ala Lys  
1 5 10 15  
Glu Leu Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu Ile Leu Val  
20 25 30  
Ser Gly Gly Ile Gly Ala Leu Val Arg Leu Lys Ser Leu Gln Gly Asp  
35 40 45  
Lys Leu Glu Val Ser Leu Lys Asn Asn Val Val Ser Val Asn Lys Glu  
50 55 60  
Pro Val Ala Glu Pro Asp Ile Met Ala  
65 70

<210> 10  
<211> 67  
<212> PRT  
<213> Homo sapiens

<400> 10  
 Arg Ala Leu Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly Asp Ala Lys  
 1 5 10 15  
 Glu Leu Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu Ile Leu Val  
 20 25 30  
 Ser Gly Gly Ile Gly Ala Leu Val Arg Leu Lys Ser Leu Gln Gly Asp  
 35 40 45  
 Lys Leu Glu Val Ser Leu Lys Asn Asn Val Val Ser Val Asn Lys Glu  
 50 55 60  
 Pro Val Ala  
 65

<210> 11  
 <211> 18  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> D-IV-AA(18)

<400> 11  
 Lys Glu Leu Ala Asn Ile Leu Lys Ala Ala Ile Gly Asp Glu Ile Leu  
 1 5 10 15  
 Val Ser

<210> 12  
 <211> 18  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> D-IV-L(18)

<400> 12  
 Lys Glu Ser Ala Asn Ser Ser Lys Tyr His Ile Gly Asp Glu Ile Leu  
 1 5 10 15  
 Val Ser

<210> 13  
 <211> 18  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> D-IV-R(18)

<400> 13

Lys Glu Leu Ala Asn Ile Leu Lys Tyr His Ser Gly Asp Glu Ser Ser  
1 5 10 15

Val Ser

<210> 14

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> D-IV-LYHR(18)

<400> 14

Lys Glu Ser Ala Asn Ser Ser Lys Tyr His Ser Gly Asp Glu Ser Ser  
1 5 10 15

Val Ser

<210> 15

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> D-IV-LAA(18)

<400> 15

Lys Glu Ser Ala Asn Ser Ser Lys Ala Ala Ile Gly Asp Glu Ile Leu  
1 5 10 15

Val Ser

<210> 16

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> D-IV-AAR(18)

<400> 16

Lys Glu Leu Ala Asn Ile Leu Lys Ala Ala Ser Gly Asp Glu Ser Ser  
1 5 10 15

Val Ser

<210> 17  
<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> D-IV-AA

<400> 17  
Gly Asp Ala Lys Glu Leu Ala Asn Ile Leu Lys Ala Ala Ile Gly Asp  
1 5 10 15  
Glu Ile Leu Val Ser Gly Gly Ile Gly Ala Leu Val Arg  
20 25

<210> 18  
<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> D-IV-L

<400> 18  
Gly Asp Ala Lys Glu Ser Ala Asn Ser Ser Lys Tyr His Ile Gly Asp  
1 5 10 15  
Glu Ile Leu Val Ser Gly Gly Ile Gly Ala Leu Val Arg  
20 25

<210> 19  
<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> D-IV-R

<400> 19  
Gly Asp Ala Lys Glu Leu Ala Asn Ile Leu Lys Tyr His Ser Gly Asp  
1 5 10 15  
Glu Ser Ser Val Ser Gly Gly Ile Gly Ala Leu Val Arg  
20 25

<210> 20  
<211> 29

<212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> D-IV-LYHR  
  
 <400> 20  
 Gly Asp Ala Lys Glu Ser Ala Asn Ser Ser Lys Tyr His Ser Gly Asp  
 1 5 10 15  
  
 Glu Ser Ser Val Ser Gly Gly Ile Gly Ala Leu Val Arg  
 20 25

<210> 21  
 <211> 29  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> D-IV-LAA

<400> 21  
 Gly Asp Ala Lys Glu Ser Ala Asn Ser Ser Lys Ala Ala Ile Gly Asp  
 1 5 10 15  
  
 Glu Ile Leu Val Ser Gly Gly Ile Gly Ala Leu Val Arg  
 20 25

<210> 22  
 <211> 29  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> D-IV-AAR

<400> 22  
 Gly Asp Ala Lys Glu Leu Ala Asn Ile Leu Lys Ala Ala S